Serial No. Not Yet Assigned

Atty. Doc. No. 2004P16812WOUS

Amendments To The Claims:

Please amend the claims as shown.

1-10 (canceled)

11. (new) A method for determining a phase of an internal combustion engine, comprising:

determining an initial phase angle of a camshaft of the engine;

adjusting the phase angle of the camshaft by a phase adjusting device;

identifying a reflux of gas from an outlet zone into an intake zone of the engine;

terminating the camshaft adjustment once exhaust gas reflux has been identified;

determining the adjusted phase angle of the camshaft;

determining a correction value of the phase angle as a function of the initial phase angle and the adjusted phase angle; and

correcting the adjusted phase angle by the correction value for subsequent engine operation.

- 12. (new) The method as claimed in claim 11, wherein the reflux of gas is identified as a function of an intake pipe pressure.
- 13. (new) The method as claimed in claim 12, wherein the reflux of gas is identified when an intake pipe pressure exceeds a predetermined intake pipe pressure value associated with a predetermined operating condition of the engine.
- 14. (new) The method as claimed in claim 13, wherein the reflux of gas is identified when an amplitude of a position of the intake pipe pressure exceeds a predetermined pulsation threshold value.
- 15. (new) The method as claimed in claim 11, wherein the reflux of gas is identified as a function of an intake zone gas temperature.

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16. (new) The method as claimed in claim 15, wherein the reflux of gas is identified when the temperature of the gas in the intake zone exceeds a predetermined temperature value.

- 17. (new) The method as claimed in claim 11, wherein the reflux of gas is identified as a function of a temperature of the outlet zone gas when the detected temperature of the outlet zone gas changes from a determined value representative of the absence of exhaust gases to a second determined value representative of the presence of exhaust gases during an operating state of the internal combustion engine when fuel is not fed in.
- 18. (new) The method as claimed in claim 17, wherein the reflux of gas is identified when the temperature of the outlet zone gas exceeds a predetermined second temperature value.
- 19. (new) The method as claimed in claim 18, wherein a gas type sensor is provided in the exhaust gas zone that produces a measurement signal representative of the presence or absence of exhaust gases in the region of the gas type sensor.
- 20. (new) A device for determining a phase of an internal combustion engine having an intake zone, and outlet zone, a crankshaft, a camshaft and gas exchange valves actuated by the camshaft, comprising:

a camshaft phase angle sensor that determines a phase angle of the camshaft relative to the crankshaft position and outputs a determined phase angle;

a camshaft phase angle adjusting device that adjusts the phase angle of the camshaft relative to the crankshaft;

a controller connected to the phase angle sensor and phase angle adjusting device that: receives the determined phase angle from the phase angle sensor,

activates the phase angle adjusting device until a reflux of gas from the outlet zone into the intake zone is identified,

determines a phase angle correction value as a function of the determined phase and a predetermined default phase angle, and

corrects the determined phase angle as a function of the correction value for subsequent operation of the engine.

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21. (new) A method for determining a phase of an internal combustion engine, comprising:

determining an initial phase angle of a camshaft of the engine; adjusting the phase angle of the camshaft by a phase adjusting device; identifying a reflux of gas from an outlet zone into an intake zone of the engine; and terminating the camshaft adjustment once exhaust gas reflux has been identified.

- 22. (new) The method as claimed in claim 21, further comprising determining the adjusted phase angle of the camshaft.
- 23. (new) The method as claimed in claim 22, further comprising determining a correction value of the phase angle as a function of the initial phase angle and the adjusted phase angle.
- 24. (new) (new) The method as claimed in claim 23, further comprising correcting the adjusted phase angle by the correction value for subsequent engine operation.